

Applicant : Moncef Jendoubi
Appl. No. : 09/930,715
Examiner : Teresa D. Wessendorf
Docket No. : 705403.6 (formerly 266/226)

AMENDMENTS TO THE CLAIMS

Please amend claims 14 - 17 as follows:

1-13. (Cancelled).

14. (Currently Amended) A method to analyze differential gene expression in human tissue samples derived from different biological conditions comprised of the steps of:

obtaining at least two samples from a human, wherein the at least two samples are comprised of proteins expressed as gene products,

placing the proteins in discrete areas of an array that physically separate the at least two samples,

providing a population of at least 100 different antibodies wherein each has ~~having~~ specific binding affinity to an expression product of a human gene sequence,

contacting each of the at least two samples with the each member of a population of at least 100 different antibodies, ~~at the discrete areas of the array~~

detecting ~~an~~ antibody-binding reaction between members of the population and the antibodies and the proteins contained at the discrete areas of the array, and

identifying differential gene expression between the at least two distinct biological conditions by correlating differences in the antibody binding reactions in the at least two samples with expression of the gene sequence identified with the population antibodies.

15. (Currently Amended) The method of claim 14 wherein the step of providing population of at least 100 antibodies is comprised of obtaining *in vivo* expression of the gene sequence to yield murine polyclonal antibodies having specific binding affinity to the expression product of the gene sequence.

16. (Currently Amended) The method of claim 14 wherein the step of contacting the at least two samples with the antibodies is performed on at least 100 samples.

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17. (Currently Amended) The method of claim 14 wherein the step of obtaining at least two samples from a human wherein the at least two samples are comprised of proteins expressed as gene products in distinct biological conditions is comprised of providing a first sample comprised of protein extract from normal human tissue and a second sample comprised of protein extract from a diseased sample of the same tissue.

18. (Previously Presented) The method of claim 17 wherein the second sample is protein extract from cancer cells or tissue.

19. (Previously Presented) The method of claim 17 wherein the diseased sample results from exposure to a chemical agent.

20. (Previously Presented) The method of claim 18 wherein the identifying step is comprised of identifying genes that are differentially expressed in cancerous tissue.

21. (Previously Presented) The method of claim 14 further comprising the step of identifying the expression product of the gene sequence.

22-23. (Cancelled)